

compounds, alkaline earth metal compounds, rare earth metal compounds, molybdenum compounds, zirconium compounds, zinc compounds, manganese compounds and copper compounds.

5. (Amended) The method according to claim 1, wherein the temperature of the dehydrogenation reaction is between 480 and 650 °C.

A
A 6. (Amended) The method according to claim 1, wherein the feed amount of the steam which is fed together with the raw material triisopropyl benzene is between 5 and 80 times in weight ratio as large as the feed amount of the triisopropyl benzene, in the dehydrogenation reaction.

7. (Amended) The method according to claim 1, wherein the feed amount of the triisopropyl benzene is between 0.01 and 1.4 on LHSV.

8. (Amended) The method according to claim 1, wherein the feed amount of the triisopropyl benzene is between 0.01 and 1.0 on LHSV.

A 2
A 3 12. (Amended) The method according to claim 9, wherein the feed amount of the triisopropyl benzene is between 0.01 and 1.4 in liquid hourly space velocity LHSV.

13. (Amended) The method according to claim 9, wherein the feed amount of the triisopropyl benzene is between 0.01 and 1.0 in liquid hourly space velocity LHSV.

14. (Amended) The method according to claim 9, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

15. (Amended) The method according to claim 9, wherein triisopropyl benzene is 1,3,5-triisopropyl benzene.

16. (Amended) The method according to claim 9, characterized in that the solid catalyst comprises at least one compound selected from the group consisting of alkali metal compounds, alkaline earth metal compounds, rare earth metal compounds, molybdenum compounds, zirconium compounds, zinc compounds, manganese compounds and copper compounds.

20. (Amended) The method according to claim 17, wherein the feed amount of the diisopropyl benzene is between 0.01 and 1.4 in liquid hourly space velocity LHSV.

21. (Amended) The method according to claim 17, wherein the feed amount of the diisopropyl benzene is between 0.1 and 1.0 in liquid hourly space velocity LHSV.

100069643-022802
E A 2

A 3

22. (Amended) The method according to claim 17, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

23. (Amended) The method according to claim 17, wherein diisopropyl benzene is meta-diisopropyl benzene, and isopropenyl cumene and diisopropenyl benzene are meta-isopropenyl cumene and meta-diisopropenyl benzene, respectively.

24. (Amended) The method according to claim 17, wherein diisopropyl benzene is para-diisopropyl benzene, and isopropenyl cumene and diisopropenyl benzene are para-isopropenyl cumene and para-diisopropenyl benzene, respectively.

25. (Amended) The method according to claim 17, characterized in that the solid catalyst comprises at least one compound selected from the group consisting of alkali metal compounds, alkaline earth metal compounds, rare earth metal compounds, molybdenum compounds, zirconium compounds, zinc compounds, manganese compounds and copper compounds.

-- 26. (New) The method according to claim 3, characterized in that the solid catalyst comprises at least one compound selected from the group consisting of alkali metal compounds, alkaline earth metal compounds, rare earth metal compounds, molybdenum

100000-5196900
208220-022802

E20
A3

A4

compounds, zirconium compounds, zinc compounds, manganese compounds and copper compounds.

27. (New) The method according to claim 4, wherein the temperature of the dehydrogenation reaction is between 480 and 650 °C.

28. (New) The method according to claim 5, wherein the feed amount of the steam which is fed together with the raw material triisopropyl benzene is between 5 and 80 times in weight ratio as large as the feed amount of the triisopropyl benzene, in the dehydrogenation reaction.

29. (New) The method according to claim 6, wherein the feed amount of the triisopropyl benzene is between 0.01 and 1.4 on LHSV.

30. (New) The method according to claim 6, wherein the feed amount of the triisopropyl benzene is between 0.01 and 1.0 on LHSV.

31. (New) The method according to claim 10, wherein the feed amount of the triisopropyl benzene is between 0.01 and 1.4 in liquid hourly space velocity LHSV.

A
4
10069643-02200-208220-E
2

32. (New) The method according to claim 10, wherein the feed amount of the triisopropyl benzene is between 0.01 and 1.0 in liquid hourly space velocity LHSV.

33. (New) The method according to claim 13, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

34. (New) The method according to claim 32, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

35. (New) The method according to claim 14, characterized in that the solid catalyst comprises at least one compound selected from the group consisting of alkali metal compounds, alkaline earth metal compounds, rare earth metal compounds, molybdenum compounds, zirconium compounds, zinc compounds, manganese compounds and copper compounds.

36. (New) The method according to claim 18, wherein the feed amount of the diisopropyl benzene is between 0.01 and 1.4 in liquid hourly space velocity LHSV.

A
4
2
2
0
8
2
0
0
0
5
6
9
3
4
2
0
0
1
0
0

37. (New) The method according to claim 18, wherein the feed amount of the diisopropyl benzene is between 0.1 and 1.0 in liquid hourly space velocity LHSV.

38. (New) The method according to claim 20, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

39. (New) The method according to claim 36, wherein the solid catalyst is mainly composed of an iron compound, a potassium compound and a magnesium compound.

40. (New) The method according to claim 22, wherein diisopropyl benzene is meta-diisopropyl benzene, and isopropenyl cumene and diisopropenyl benzene are meta-isopropenyl cumene and meta-diisopropenyl benzene, respectively.

41. (New) The method according to claim 22, wherein diisopropyl benzene is para-diisopropyl benzene, and isopropenyl cumene and diisopropenyl benzene are para-isopropenyl cumene and para-diisopropenyl benzene, respectively.

42. (New) The method according to claim 22, characterized in that the solid catalyst comprises at least one compound selected from the group consisting of alkali metal

A4

10001449620220822-A

compounds, alkaline earth metal compounds, rare earth metal compounds, molybdenum
compounds, zirconium compounds, zinc compounds, manganese compounds and copper
compounds.--

E/Hy

100069643.022802